

Patent Claims

1. A toothbrush which has a bristle-carrying front head part (2) and a handle (3) and is produced by conventional or multi-component injection molding, wherein the handle (3), over at least part of its length, has an essentially cylindrical and closed cavity (7) extending in the longitudinal direction of the toothbrush, at least that part of the handle (3) which encloses the cavity (7) consisting of an at least partially transparent material.
2. The toothbrush as claimed in claim 1, wherein means with an aesthetic effect are accommodated in the closed cavity (7).
3. The toothbrush as claimed in claim 1 or 2, wherein the cavity (7) is kept closed from the rear by means of a closure part (8; 8'; 22; 27) which can be connected non-releasably to the handle (3) at the rear end of the latter.
4. The toothbrush as claimed in claim 1 or 2, wherein, for optionally filling the cavity (7), the cavity (7) can be closed from the rear by means of a closure part (8; 8'; 22; 27; 37) which can be connected releasably to the handle (3) at the rear end of the latter.
5. The toothbrush as claimed in claim 2 and claim 4, wherein the means are accommodated in an ampoule (16; 17; 18; 19; 20) which can be inserted into the cavity (7).
6. The toothbrush as claimed in claim 2 and claim 4, wherein the means are formed by a roll (14; 15), preferably made of plastic or cardboard, which has

printing on it or has a film adhesively bonded to it.

- 5 7. The toothbrush as claimed in one of claims 2 to 4, wherein the means are formed by an at least partially transparent or translucent section of film which butts against the inner wall of the cavity and has printing on it.
- 10 8. The toothbrush as claimed in one of claims 2 to 4, wherein the means are formed by loose articles.
- 15 9. The toothbrush as claimed in one of claims 2 to 4, wherein the means are formed by a liquid.
10. The toothbrush as claimed in one of claims 2 to 4, wherein the means are formed by a liquid containing floating articles.
- 20 11. The toothbrush as claimed in one of claims 2 to 4, wherein the means are formed by sand or powder.
12. The toothbrush as claimed in one of claims 2 to 4, wherein the means are formed by luminescent parts.
- 25 13. The toothbrush as claimed in one of claims 2 to 4, wherein the means are formed by hologram foils.
14. The toothbrush as claimed in one of claims 2 to 4, wherein the means are formed by a gas.
- 30 15. The toothbrush as claimed in claim 1 or 2 and claim 3, wherein the means are formed by an ampoule (20) which has printing on it or has a film adhesively bonded to it.
- 35 16. The toothbrush as claimed in claim 3 or 4, wherein the closure part (22; 27; 37) is provided with a positioning part (23; 24; 25; 28; 38) for

positioning the toothbrush (1) on an underlying surface.

- 5 17. The toothbrush as claimed in claim 16, wherein the positioning part (38) has a planar standing surface (39) at right angles to the longitudinal axis (L) of the toothbrush and closure part.
- 10 18. The toothbrush as claimed in one of claims 3, 4, 16 and 17, wherein the closure part is produced from a thermoplastic elastomer (TPE).
- 15 19. The toothbrush as claimed in claim 4 and either of claims 5 and 15, wherein the ampoule (16; 17; 18; 19; 20) is kept in its position in the cavity (7) by a securing means (31, 35).
- 20 20. The toothbrush as claimed in claim 19, wherein the securing means (31, 35) comprises rearwardly directed tongues (31b) which are arranged in the front region of the handle cavity (7), extend in the longitudinal direction of the toothbrush, are made of an elastically compliant material and are arranged in the form of a circle, it being the case that, when the cavity (7) is closed by the closure part (8'; 38), the ampoule (16; 17; 18; 19; 20) is kept in its position between said tongues (31b) and forwardly directed tongues (35) of the closure part (8'; 38), which are likewise arranged in the form of a circle, extend in the longitudinal direction of the toothbrush and consist of an elastically compliant material.
- 25 30 35 21. The toothbrush as claimed in claim 3, wherein the closure part (8; 8'; 22; 27) is connected to the handle (3) by welding, preferably high-frequency welding, or adhesive bonding or a non-releasable snap-in connection.

22. The toothbrush as claimed in claim 4, wherein the closure part (8; 8'; 22; 27; 37) is connected to the handle (3) by a releasable snap-in connection or a screw connection or a bayonet connection.

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23. The toothbrush as claimed in claim 1 or 2 and as claimed in claim 4, wherein useful articles such as toothpicks or an ampoule with mouthwash or toothpaste are accommodated in the closed cavity (7).

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AMENDED CLAIMS

[Received at the International Bureau on October 25, 2000 (10.25.00); original claims 1-23 replaced by new claims 1-15 (three pages of German text)]

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1. A toothbrush which has a bristle-carrying front head part (2) and a handle (3) and is produced by conventional or multi-component injection molding, the handle (3), over at least part of its length, having an essentially cylindrical and closed cavity (7) extending in the longitudinal direction of the toothbrush, at least that part of the handle (3) which encloses the cavity (7) consisting of an at least partially transparent material, and means with an aesthetic effect being accommodated in the closed cavity (7), wherein the means are formed by an article (14; 15; 20) which is of an essentially cylindrical outer shape or is rolled together to form a roll, has printing on it or has a film adhesively bonded to it or comprises a film.

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2. The toothbrush as claimed in claim 1, wherein the cavity (7) is kept closed from the rear by means of a closure part (8; 8'; 22; 27) which can be connected non-releasably to the handle (3) at the rear end of the latter.

3. The toothbrush as claimed in claim 1, wherein, for optionally filling the cavity (7), the cavity (7) can be closed from the rear by means of a closure part (8; 8'; 22; 27; 37) which can be connected releasably to the handle (3) at the rear end of the latter.

4. The toothbrush as claimed in one of claims 1 to 3, wherein the article is formed by a roll (14; 15), preferably made of plastic or cardboard, which has

printing on it or has a film adhesively bonded to it.

5 5. The toothbrush as claimed in one of claims 1 to 3, wherein the article is formed by an at least partially transparent or translucent section of film which butts against the inner wall of the cavity and has printing on it.

10 6. The toothbrush as claimed in one of claims 1 to 3, wherein the article is formed by an ampoule (20) which has printing on it or has a film adhesively bonded to it.

15 7. The toothbrush as claimed in one of claims 1 to 6, wherein the article comprises luminescent parts.

8. The toothbrush as claimed in one of claims 1 to 6, wherein the article comprises hologram foils.

20 9. The toothbrush as claimed in claim 6, wherein the ampoule (20) is kept in its position in the cavity (7) by a securing means (31, 35).

25 10. The toothbrush as claimed in claim 9, wherein the securing means (31, 35) comprises rearwardly directed tongues (31b) which are arranged in the front region of the handle cavity (7), extend in the longitudinal direction of the toothbrush, are made of an elastically compliant material and are arranged in the form of a circle, it being the case that, when the cavity (7) is closed by the closure part (8'; 38), the ampoule (20) is kept in its position between said tongues (31b) and forwardly directed tongues (35) of the closure part (8'; 38), which are likewise arranged in the form of a circle, extend in the longitudinal direction of the toothbrush and consist of an elastically compliant material.

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11. The toothbrush as claimed in one of claims 2 to 10, wherein the closure part (22; 27; 37) is provided with a positioning part (23; 24; 25; 28; 38) for positioning the toothbrush (1) on an underlying surface.
12. The toothbrush as claimed in claim 11, wherein the positioning part (38) has a planar standing surface (39) at right angles to the longitudinal axis (L) of the toothbrush and closure part.
13. The toothbrush as claimed in one of claims 2 to 12, wherein the closure part is produced from a thermoplastic elastomer (TPE).
14. The toothbrush as claimed in claim 2, wherein the closure part (8; 8'; 22; 27) is connected to the handle (3) by welding, preferably high-frequency welding, or adhesive bonding or a non-releasable snap-in connection.
15. The toothbrush as claimed in claim 3, wherein the closure part (8; 8'; 22; 27; 37) is connected to the handle (3) by a releasable snap-in connection